



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/535,121

01/27/2006

Catriona Gifford

HO-P03174US0

3620

26271 7590 12/30/2008
FULBRIGHT & JAWORSKI, LLP
1301 MCKINNEY
SUITE 5100
HOUSTON, TX 77010-3095

EXAMINER

KRAUSE, ANDREW E

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

12/30/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/535,121	Applicant(s) GIFFORD, CATRIONA	
	Examiner ANDREW KRAUSE	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/7/06</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 7 recites the limitation "high-moisture extruded material" in line 4. The scope of the claim is confusing given that it is not clear if this high moisture extrudate is the same as the extrudate material of claim 1.

4. The term "high-moisture" in claim 7 is a relative term which renders the claim indefinite. The term "high-moisture" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. **Claims 1-6,8,14** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Johnson et al(US #4,892,749, hereafter Johnson) in view of Howsam and Street (WO

00/69276, hereafter Howsam), in light of Appleman, (US #4,169,162, hereafter

Appleman).

4. Regarding applicants recitation of the limitation, “for incorporation into packaged pet foods”, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.

5. **Regarding claim 1**, Johnson discloses a proteinaceous meat analogue comprising;

- a. a gelled matrix composed of ground meat-based and cereal-based materials (column 3, lines 53-67, column 5, lines 9-15 disclose the grinding) and additionally a textured vegetable protein (column 3, lines 10-15)
6. Johnson fails to disclose the addition of internally texturized, proteinaceous extrudate material, wherein the internal texturization has a fibrous structure to the matrix.
7. However, Howsam discloses a meat extender that is an internally texturized, proteinaceous extrudate, having a fibrous structure (p.4, lines 28-34, p. 2, and lines 30-34).
8. An example extrudate in Howsam has a moisture content of 48-52% (p. 20, lines 11-12). A gelled matrix as disclosed by Johnson consisting of 55% lean meat, 35% fat and 10% rice, would have a moisture content in the range of 35-46% (Johnson column 11, lines 35-40 in light of Johnsons disclosure that the cooked rice contains 75% moisture, column 4, lines 40-50, and Appleman, column 1, lines 20-30, which disclose that lean animal meat contains 50-70% moisture.) Therefore the matrix and the extrudate will have different moisture contents.
9. It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the gelled matrix containing ground meat and cereal-based materials as disclosed by Johnson with the addition of a texturized proteinaceous

extrudate as disclosed by Howsam, because the extrudate is useful as a meat extender in food products containing real meat (p. 17, lines 4-7).

10. **Regarding claims 2 and 3**, the amount of texturized proteinaceous extrudate added to the meat and cereal matrix is not explicitly disclosed in the combination of references. However, it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the amount of extrudate added to the matrix as a meat extender to reduce the cost of the food product for the intended purpose, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

11. **Regarding claim 4**, Howsam further discloses an extrudate material having cross sectional dimensions of 50 mm x 7 mm (p. 18, lines 26-32).

12. **Regarding claim 5**, Howsam further discloses that the extrudate material comprises;

b. About 40-95% by weight edible proteinaceous material comprising mixtures of defatted soy flour, soy meal, soy concentrate, cereal gluten in vital or starch containing form and egg white; and

c. Up to about 7% by weight of edible mineral binding and cross linking compounds (p. 4 line 30-p. 5 line 5).

13. **Regarding claim 6**, Howsam further discloses that the extrudate material comprises 40-55% by mass defatted soy flour, soy meal, or soy concentrate, about 35-45% by mass vital wheat gluten, egg white powder, a mixture of vital wheat gluten and maize gluten or a mixture of vital wheat gluten and wheat flour, .1-7.0% by mass of non leaching mineral compounds, 0-5% nutritional fiber additives, 0-3.0% by mass flavoring agents, and 0-3.0% coloring agents (page 6, lines 13-25).

14. **Regarding claim 14**, Howsam further discloses that the fiber additives are cellulose or beet pulp (p. 6, lines 20-21).

15. **Regarding claim 8**, Johnson and Howsam disclose the protenaceous meat analog comprising texturized extrudate material, having fibrous internal texturization, dispersed in a gelled matrix of meat and cereal-based materials having different moisture contents (see rejection of claim 1). Howsam further discloses mixing the extrudate with real meat as an extender for meat products and filling the mixture into a can to provide a canned food product (Howsam, p. 3, lines 21-28).

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al(US #4,892,749, hereafter Johnson) and of Howsam and Street (WO 00/69276, hereafter Howsam), in further view of Ciantar et al (USPGPUB #2004/0265470 A1, hereafter Ciantar).

16. Johnson and Howsam disclose the proteinaceous meat analogue of claim 1. Johnson further discloses compositions using ground or diced muscle meat from pork,

ground meat from turkey (example 4), binding materials, cereal, (rice acts as a binding material and constitutes a cereal) and flavors (column 3, lines 1-15, column 4, lines 1-19), and water (hydrated in the rice, also example 7 discloses that water can be added as an ingredient.) Howsam discloses a high moisture extrudate material, which is added to the product of Johnson as an extender to form the product of claim 1.

17. Johnson and Howsam fail to disclose adding ground organs to the product.

18. Ciantar discloses using ground poultry offal (organs), including liver and lungs as an additive to pet foods (Figures 4 and 5, [0035]-[0047]).

19. It would have been obvious to one having ordinary skill in the art at the time of the invention modify the pet food composition of Johnson and Howsam with the addition of ground poultry organs as disclosed by Ciantar, because incorporating ground organ meats into the background meat matrix of commercial packaged pet foods serves as a palatability enhancer ([0045]).

20. Regarding the quantities of combined ingredients, the combination of Johnson, Howsam and Ciantar does not explicitly disclose combining the ingredients in the ratios claimed. However, the range of lean meat, fat, cereal and other ingredients allowed for in Johnson (column 11, lines 35-40) enables using the ingredients in the claimed amounts, and it would have been obvious to one having ordinary skill in the art at the time of the invention to adjust the amounts of each ingredient added for the intended

purpose, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

21. **Claims 9-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson et al(US #4,892,749, hereafter Johnson) and Howsam and Street (WO 00/69276, hereafter Howsam), in view of Jordan (US #2,230,062), hereafter Jordan.

22. **Regarding claims 9 and 10**, Howsam and Johnson disclose a proteinaceous meat analogue, consisting of particles of texturised, proteinaceous extrudate material dispersed in a matrix composed of ground meat-based and cereal-based materials. Johnson discloses preparing a paste including comminuted meat material, cereal, and binder materials (column 3, lines 53-67, column 5, lines 9-15 disclose the grinding). Johnson also discloses blending the paste with a textured proteinaceous material as an extender (column 3, lines 10-13). Johnson fails to explicitly disclose that the textured proteinaceous extender is an extrudate; however Howsam discloses a meat extender that is an internally texturized, proteinaceous extrudate, having a fibrous structure (p.4, lines 28-34, p. 2, and lines 30-34).

23. It would have been obvious to one having ordinary skill in the art at the time the invention to combine the gelled matrix containing ground meat and cereal-based materials as disclosed by Johnson with the addition of a texturized proteinaceous

extrudate as disclosed by Howsam, because mixing the extrudate is disclosed to be useful as a meat extender in food products containing real meat (p. 17, lines 4-7).

24. Howsam further discloses cutting meat analogue materials to a size and shape appropriate for the desired use (p. 19, lines 1-4).

25. Howsam and Johnson fail to disclose processing the blend to cause the paste to set.

26. However, Jordan discloses a method of treating comminuted meat products wherein the meat products are filled into cans and heated using retort processing (Jordan, page 2, right hand column, lines 5-20). This heat treatment will cause the paste to set by cooking the meat, thereby encapsulating the extrudate material.

27. It would have been obvious to one having ordinary skill in the art at the time of the invention to combine the method of producing a meat analogue disclosed by Howsam and Johnson with the addition of a thermal processing step as disclosed by Jordan, because the thermal processing step sterilizes the meat product (Jordan, page 2, right hand column, lines 5-20).

28. **Regarding claims 11 and 12**, Jordan further discloses that the processing step includes filling the meat product into solid casings (cans) and retorting at 225°F for about an hour (p. 2, right hand column, lines 5-20). Although Jordan does not explicitly disclose retorting at 95°C, the temperature disclosed is substantially close to that of the

instant claims one of ordinary skill in the art would have expected treatments with temperatures that are in such close proportions to those in the prior art to be prima facie obvious, and to yield the same properties. *Titanium Metals Corp.*, 227 USPQ 773 (CAFC 1985). Regarding the dimensions of the casings recited in **claim 12**, Johnson, Howsam and Jordan disclose the claimed invention, except that they do not explicitly disclose that the solid casings are rectangular one having cross sectional dimensions of 50 mm by 100 mm. It would have been obvious to one having ordinary skill in the art at the time of the invention to use casings in the shape and dimensions claimed, since it has been held that the configuration was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration claimed was significant. *In re Dailey*, 357 F. 2d 669, 149 USPQ 47 (CCPA 1980).

29. **Regarding claim 13**, Johnson, Howsam, and Jordan disclose the method of claim 9, but fail to explicitly disclose cutting the analogue to the dimensions claimed.

However, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the size of the meat analogue for the intended purpose, since it has been held that determining the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch* 617 F. 2d 272, 205 USPQ 215 (CCPA 1980).

30. Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW KRAUSE whose telephone number is (571)270-7094. The examiner can normally be reached on 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ANDREW KRAUSE/
Examiner, Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794